

### **Remarks**

The following remarks are submitted to address all issues in this case, and to put this case in condition for allowance. Application claims 14, 17, 21, 22, 24, 25, 27-29, 31, and 32 are pending in the application. Application claims 14 and 17 are independent.

Applicant has studied the Office Action mailed April 10, 2007, and has the following remarks.

### **Allowable Subject Matter**

The Examiner is again thanked for his statement that claims 17 and 21 are allowed.

### **35 USC § 103**

The Examiner rejected Claims 14 and 27-29 as being obvious over Waters et al. (US 4,344,505) in view of Helbig (US 4,312,423); and Claims 22, 24, 25, and 31-32 as obvious in light of the above combination in further view of Anghinetti et al. (US 3,896,595), Fuller (US 4,281,743), Porter (US 5,628,158), or Daw (US 4,832,153).

Applicant respectfully contends that the Examiner has not shown all limitations of the pending claims in that the Examiner misreads the principle reference (Waters). The Examiner has therefore failed to present a prima facie case of obviousness. Applicant further respectfully contends that the Examiner incorrectly found Applicant's secondary considerations nonpersuasive.

**I. Applicant respectfully traverses the Examiner's statement that the cited references show the limitations as claimed, because Waters does not provide a separable cover; Applicant respectfully denies the Examiner has shown a prima facie case of obviousness.**

Applicant first respectfully contends that the Examiner still has not made a prima facie case of obviousness. Throughout prosecution of this application, Applicant has respectfully

contended that the Examiner misread the Waters reference as providing an insulating cover comprising a continuous frame and a removable closure member when it only shows an insulating cover with an attached closure member. In the Office Action dated December 14, 2006, the Examiner did not specifically enumerate his misreading or respond to Applicant's previous arguments, but merely stated that "Waters et al as modified by Helbig and other references for the dependent claims, shows the limitations as claimed." As such, in this Response, Applicant again explains how the Examiner inaccurately and inconsistently equated the "cap" of Waters to the removable "closure member" of the present claims.

While the §103 rejection involves Waters in combination with other references, the disclosure of Waters is of particular interest for purposes of this proceeding. The problem seems to be one of terminology; that is, the Examiner equates the cap of Waters with the closure member of the present claims, to which it does not conform. Waters only describes caps with inseparable covers. In the first description of the Waters reference, Waters provides an insulation cap (10) that provides access to the attic opening by 1) hinged movement of a cover (28) that is inseparable from the cap (10). See FIGS. 1-3; col. 2 ll. 54-57 ("A hinge means 14 . . . supports one side or end of the cap 10 to . . . preferably, a portion (cover 28) of the cap.")) (emphasis added). It is clear from this discussion that Waters provides only a cap including a block 10 and hinged (connected) cover 28. There appears to be no dispute that a hinged cover does not provide for the structure of the instant claims. The Examiner asserts that other covers are contemplated, but refers to a section of Waters' disclosure discussing the cap. Waters discloses moving the entire cap relative to the attic on hinges (col. 2 ll. 54-57) ("A hinge means 14 . . . supports one side or end of the cap 10 to the attic floor AF . . .") (emphasis added) or rails (col. 3 ll. 10-15) ("[T]here might be provided a pair of rails along the attic floor and flanges

extending outwardly from the cap 10 to provide sliding movement of the cap for purposes of moving the cap to the second opened position.”) (emphasis added). These references to cap 10 provide no indications of alternative methods of connecting the cover 25 to cap 10.

Waters does not provide for the insulating cover of the instant claims, which require a frame and a detachable closure member, the cover then being placed on the surrounding structure of an existing attic opening. The Examiner’s arguments are flawed in their reliance on the Examiner’s repeated interchanging of elements of the present claims to which the cap 10 of Waters corresponds. For example, the Examiner has asserted that the cap 10 of Waters is in fact the detachable closure member, as is the cover 28. See Office Action dated July 7, 2006, at 3; see also Response at 9; Office Action dated December 14, 2006 at 3 (conflating manipulation of the cap with manipulation of the claimed detachable closure member). Applicant respectfully submits that comparison of Waters’ cap and cover, as two distinct components, to the three claimed elements of the pending claims clearly indicates the Examiner has failed to make a prima facie case of obviousness as he has not shown all elements of the claims in the references.

The Examiner asserts it would have been obvious to modify Waters in light of Helbig’s depending central portion. However, the combination of Helbig and Waters does not show all the claimed elements. Helbig does not provide for an existing attic opening having a surrounding structure integral to the attic floor upon which a cover having two detachable components (a frame and a closure member) is placed, because Helbig’s “frame” element 26 is the floor joists of the attic and Helbig’s cover is a single piece closure which seals to the existing attic structure. As set forth in detail above, Waters does not fill the gaps of Helbig; Waters does not show separation of the closure member from the frame, and so cannot show a continuous frame with a lower surface that is placed on the attic access surrounding structure and an upper

surface that detachably seals to a closure member with two continuous seals. Waters thus shows only two units, namely the surrounding attic structure and a “cap” structure; in effect, the same two elements of Helbig. Even if it were obvious to combine Helbig and Waters, the combination does not show all of Applicant’s claimed elements.

Applicant notes that all the remaining claims are dependent on claim 14 and claim 14 only stands rejected in light of the combination of Helbig and Waters. Applicant asserts that none of these secondary references in combination with any of the primary references provides the necessary elements of an existing attic opening, and a cover having a frame and a detachable closure member as discussed in claim 14. As all other claims depend from claim 14, if claim 14 is allowable in light of the references, all remaining claims are also allowable.

**II. Applicant respectfully traverses the Examiner’s statement that Applicant’s secondary considerations are nonpersuasive, in light of well-established law.**

Standing by Applicant’s assertion that the Examiner has not established a prima facie case of obviousness, Applicant additionally respectfully traverses the Examiner’s finding in the response to the pre-appeal conference that the secondary considerations were non-persuasive, as being merely opinions, without indication that the exhibits were commensurate with the scope of the claims, and not indicative of commercial success.

Applicant first respectfully reminds the Examiner of his recently affirmed duty to consider all secondary considerations. The *Graham* framework for obviousness has recently been reaffirmed, such that all secondary considerations should be taken into account in the newly “expansive and flexible approach” to obviousness rejections. *KSR Int’l Co. v. Teleflex, Inc.*, 127 S.Ct. 1727, 1729, 1741 (2007). In light of the recently elevated importance of secondary considerations, Applicant appreciatively notes that the pre-appeal brief conference appears to be

the first time the Examiner addressed the prior declarations of secondary considerations directly, and therefore now responds.

In light of *KSR*, Applicant respectfully contends the evidence of secondary considerations is probative and commensurate with the scope of the claims. First, the exhibits are commensurate in scope with the claims; particularly, Tom Donofrio and George Temme refer to The Energy Guardian® kits which have been stated to embody Applicant's claims, and which a review of Applicant's website will confirm. *See* Ex. GG (depicting Applicant's claimed frame and removable closure member in The Energy Guardian®). The exhibits are not merely stating opinions, but contain factual support for their praise and are from experienced experts in the field of residential energy conservation and are evidence of a long-felt need. Third, the exhibits reference replacement of earlier products and refer to the benefits of Applicant's extremely simple design, thus evidencing commercial success. Fourth, the skepticism of scientists and additional indications of commercial success in the Additional Supplement establishes that the results are unexpected and, in addition to the previously submitted declarations, demonstrates the significance of the claims in the instant case.

Applicant first respectfully asserts that the scope of the exhibits in the Declaration, Supplement and Additional Supplement are commensurate with the scope of the claims. Generally, The Energy Guardian® repeatedly referred to therein embodies claim 14. *See* (Addt'l Supp. Rule 132 Dec.); Ex. GG. The Examiner erroneously concluded that the exhibits of Tom Donofrio and George Temme are unclear as to what structures they refer to. In Exhibit J, Tom Donofrio specifically refers to Applicant's claimed "two part design" in rejecting the usefulness of products that contain one solid unit or two units attached; by doing so, he refers to the claimed continuous frame and removable closure member of claim 14. Donofrio also specifically refers

to the “far superior” quality of the seals provided by the claimed depending portion. Thus, his endorsing statements clearly reference the claims of the instant case and are commensurate with and embody the scope of the claims of the Applicant. In Exhibit K, George Temme specifically refers to The Energy Guardian®, which embodies claim 14.

The Energy Guardian®’s advantages that map to claim 14 are further evidenced by Exhibit Q, which touts the practical advantages generated “[b]ecause the lid of [The Energy Guardian®] kits fits right into the frame without any hooks or other devices to secure the air seal.” Similarly, Exhibit R explains that The Energy Guardian® seals effectively due to “the lid sliding into a frame,” which refers to the closure member’s frictional and snug engagement with the removable closure member. In Exhibit D, the owner and president of AEM Custom Builders, Inc. states that the extension from the lid of The Energy Guardian® is of particular benefit as it ensures the lid is correctly attached and sealed. This advantage inures from the upper portion forming flanges. Aleshire, in Exhibits E and EE, touts The Energy Guardian®’s advantage of having a lid that sealingly engages a frame. The testimonial in Exhibit Q also provides that “the air-sealing qualities of [Applicant’s] kits are great”; these qualities are directly traceable to the claimed sealing relationship. These exhibits tout the claimed device’s improvement over prior designs due to the claimed depending portion, which will sealingly engage the frame in only one position; users are therefore confident that the device is properly closed and sealed, unlike users of other devices who may inadvertently leave the device only partially covering the entire attic access opening. Thus, the advantages of The Energy Guardian® are directly linked to the structures Applicant claims in claim 14.

The previously submitted Rule 132 Declarations, as well as the Additional Supplement submitted with this Response, contain praise and fact-based testimonials from those with

extensive experience in residential energy conservation and recognition from government programs. For example, Vic Aleshire of Exhibits E and EE has worked for over 25 years in the field of residential energy conservation, including work with scientists at Oak Ridge National Laboratory. He has also used the claimed invention in weatherization training for the Weatherization Assistance Program, a U.S. Department of Energy program designed to reduce energy bills. *See* Exhibit L. As such, Exhibits E and EE, together with Exhibit L, displays much more than a mere opinion. Doug Rye’s testimonial, attached hereto as Exhibit M, also falls far short of being merely an “opinion.” Rye was referred to as possibly “the best-known residential energy consultant in the nation” by the Energy Services Bulletin, produced by an agency of the U.S. Department of Energy. *See* Exhibit N. He has also worked for over 35 years in helping lower utility bills. *See* Exhibit M. Exhibit D’s Art McKeown has nearly thirty years experience in the Home Builder’s Association. Thus, Applicant asserts that the statements in the exhibits are strong testimonials from not just one of ordinary skill in the art indicating that the claimed device is not obvious, but from highly respected and experienced experts in the field of residential energy conservation. Even if these experts’ testimonials were mere “opinions,” their status as experts makes their opinions persuasive indicators of nonobviousness. *Ex Parte James W. Shiek, Sr.*, Appeal No. 1999-0266, 1999 WL 33205719 (PTO Bd. Pat. App. & Int’f 1999)<sup>1</sup>.

Applicant next asserts that the factual findings submitted in the Exhibits are not mere “opinions,” but rather are persuasive, specific, and fact-based explanations that devices embodying claim 14 meet a long-felt need in residential energy conservation. For example, in Exhibit D, Art McKeown stated that in his nearly 30 years of experience in the Home Builders

---

<sup>1</sup> Applicant repeatedly cites herein various opinions by the Board of Patent Appeals and Interferences. Applicant understands that these opinions are nonbinding, and cites them simply to illustrate previously accepted patent examining theory and practices.

Association, he has “never seen a more practical or effective solution than” The Energy Guardian®, which embodies claim 14. Furthermore, in Exhibit E, Vic Aleshire opined that in his 25 years’ experience, The Energy Guardian® is the first product to properly insulate and seal attic accesses. In his experienced and knowledgeable opinion, Rye stated that “[t]he *Energy Guardian Kits* have set a national standard.” See also Ex. A (providing an experienced journalist’s evaluation that The Energy Guardian® meets a long-felt need); Ex. C (stating that the President of Oliver Heating and Cooling, and the Vice President of the Delaware Chapter of the Air Conditioning Contractors of America, has not seen a product comparable to The Energy Guardian® in twenty-seven years in the home cooling industry). Contrary to the Examiner’s findings, Applicant asserts that the exhibits present in the three declarations persuasively demonstrate a long-felt need in residential energy conservation met by the devices which embody the claims of the instant case.

Applicant next respectfully addresses the Examiner’s statement that Applicant has not shown commercial success. Firstly, Applicant contends that because the Examiner has not shown a prima facie case, as explained above, such a showing by Applicant is not necessary. Further, Applicant notes that commercial success is but one of many *Graham* factors which must be considered, and even if it was not shown, Applicant’s showing of other factors is probative. Without accepting that the Examiner has made a prima facie case, or that Applicant’s other showings are not sufficiently demonstrative of non-obviousness, Applicant alternatively contends that Applicant has shown commercial success in the form of replacement of earlier products and increased market share. See *Ex Parte Antero et al.*, 2003 WL 22282241, \*8-11 (PTO Bd. Pat. App. & Int’f 2003) (recognizing replacement as a valid indicator of commercial



success); *Ex Parte Fedor et al.*, 2006 WL 2786858 (PTO Bd. Pat. App & Int’f 2006) (accepting evidence of increased market share as an indicia of commercial success).

This replacement is narrated in several exhibits. In Exhibit Q, a community Energy Services Coordinator found that other products, while “an improvement over the existing conditions, . . . didn’t come close to solving the problem like your [*Energy Guardian*®] Kits. We’ve looked at other products over the years, but none of them met our standards . . . . Your kits solve this problem like no other solution that my organization has built, bought or otherwise seen available in the market.” In Exhibit R, a state agency responsible for decreasing energy costs for low income families stated that The Energy Guardian® was superior over their own handmade products for their ease of installation and quality of seal. In Exhibit S, a homeowner explained that she was “so glad [she] went with [Applicant’s unit] instead of the [attic door [she] was considering.” The testimonial in Exhibit V was supplied by a contractor who installs the claimed product even when the users do not pay for the full amount of the product because he believes it is so much better for the homeowner. Temme, in Exhibit K, states that The Energy Guardian® “is clearly the superior product available in the market today.” Exhibit F relates a statement by a president of a energy solutions company that “[t]he flimsy solutions used in the industry for years just don’t cut it.” Exhibit G advertises improvements of The Energy Guardian® over other attic cover designs on the market. Exhibit EE states that “when we measured the results for *The Energy Guardian* Kits . . . they were far greater than any alternative either commercially available or individually constructed.” Applicant also respectfully asserts commercial success as illustrated by prospective market share. This statement is supported by Exhibit T, which provides a “very good” rating for a broadcast explaining the claimed apparatus and thus illustrates a good deal of consumer interest. These testimonials illustrate marketplace

replacement and increased actual and prospective market share of previous attic entrance sealing apparatuses by The Energy Guardian®, which embodies Applicant's claims, and so indicate its commercial success.

Applicant's current and prospective increases in market share are made even more persuasive by the fact that Applicant's device carries a premium price; Applicant's claimed device is so superior to prior devices that customers willingly pay a premium for Applicant's claimed device. *See* Ex. G (explaining that The Energy Guardian® "costs more than the Draft Cap, but is stronger and provides a higher insulating value."); Ex. S (providing a testimonial from a pleased consumer who added, "You pay for what you get as the old saying goes!"); Ex. O (providing skepticism about Applicant's cost-effectiveness in light of Applicant's premium pricing); Ex. V (explaining the more expensive *Energy Guardian*® is preferred and installed at a loss even when homeowners cannot afford it).

The adoption of Applicant's device by several government programs also illustrates commercial success. The government is a large-scale contractor with a virtually unlimited marketplace, with steep competition for their contracts. Applicant's device has been used by many government agencies, including but not limited to including the Weatherization Assistance Program, a U.S. Department of Energy program designed to reduce energy bills; Atlantic Human Resources, Inc.'s Weatherization Program, which provides weatherization for low-income housing; and Tompkins Community Action, which uses federal funds to weatherize low-income housing. *See* Exs. L, R, Q; *see also* Ex. V (relating a private contractor's successful installation in federally funded low-income housing). Further, numerous state governments across the country have also used and accept the product, as indicated by Exhibit FF. The fact that so many

government organizations recommend and install Applicant's claimed device, often in low-income housing, is a clear indicator of Applicant's commercial success.

Applicant's commercial success of The Energy Guardian® is clearly a result of the claims in the instant case, as they embody the simple device produced by a small company. Where "the invention in issue is a relatively simple one . . . it seems evident that the claimed invention was the reason for the commercial success . . . in other words, that there was a nexus between the claimed invention and the commercial success." *Ex Parte James W. Shiek, Sr., supra*. Applicant's apparatus is relatively simple: three components in two pieces that seal together to insulate an attic opening. It is a tribute to Applicant's ingenuity that Applicant improved upon the simple theme of attic hatch sealing devices with a device which has received wide market acceptance and endorsement by recognized individuals in the field and government agencies tasked with energy conservation and monetary savings. In addition, Exhibits U, W, and DD illustrate that the commercial success of Applicant's claimed apparatus is not due to any corporate marketing or active promotional activity, but from "word of mouth" from enthusiastic actual users about the claimed device's advantages. Thus, due to the simplicity of Applicant's claimed apparatus and the small size of Applicant's company, Applicant's commercial success is clearly the result of Applicant's claimed apparatus.

Finally, Applicant respectfully traverses the Examiner's statement that Applicant has not provided evidence that establishes the results are unexpected and significant. The skepticism of scientists, combined with exhibits establishing the scientists were incorrect, establishes that the results are unexpected. The persuasive data shows that Applicant's claimed device provides surprising reductions in the amount of air that leaks through the attic hatch, measured in CFM (cubic feet per minute) when the atmospheric pressure is 50 Pa (also called "CFM50"). For

example, the expert in Exhibit O estimated that insulating an attic with a pulldown stair will reduce the air leakage rate of the home by 100 CFM, and specifically expressed doubt that Applicant's device would be cost-effective based on that minimal reduction. However, as evidenced by Exhibits P and H, the actual average reduction in air leakage rate for at least six customers reached at least 500 CFM and as much as 1400 CFM. Exhibit P, in particular, was generated by federally funded weatherization agencies using highly calibrated blower door machines that comply with federal standards. Aleshire, in Exhibit EE, elaborates on the power of this data:

“We have consistently recorded 200-400 CFM50 reductions for the hatches and 600-900 CFM50 reductions for the pull down ladders . . . To be sure, I did not believe that these reductions were attainable. The most respected scientists at Oak Ridge Laboratories as well as revered experts in the field consistently posit that no more than a 50 CFM50 reduction for hatches and a 100-200 CFM50 reduction for pull down ladders are achievable with any kit or constructed measure. I have had a number of occasions where I had to demonstrate the effectiveness of your kits in person to other experts and clients who did not believe that I could substantiate what they deemed were wild claims of effectiveness in this area.”

As further evidence of the unexpected nature of this reduction, one customer explains that she was “amazed” by the results. *See* Ex. S. The expert's skepticism regarding Applicant's cost-effectiveness was also put to rest by testimonials of cost-effectiveness, further illustrating the unexpected nature of Applicant's success. *See, e.g.,* Ex. C.

Furthermore, the exhibits establish the significance of the results as evidenced by receipt of the Environmental Excellence Award (Exhibit A), and the degree to which the public has taken notice of Applicant's results (Exhibits T, U, and W). Most importantly, numerous exhibits establish the dramatic improvement in home cooling due to installation of Applicant's claimed apparatus. *See, e.g.,* Ex. H (showing dramatic blower door results); Ex. P (same); Ex. X

(showing the applicant's own decrease in utility bills since installing the claimed apparatus); Ex. Y (explaining that the claimed apparatus is so effective that additional reinsulation is needed to equally distribute the newly recaptured conditioned air); Ex. Z (showing a consumer's decrease in utility bills since installing the claimed apparatus); Ex. AA (citing noticeable improvement and "a HUGE difference"); Ex. BB (same); Ex. CC (exclaiming that Applicant's device "works!"); Ex. DD (citing "a NOTICEABLE difference"). In light of these numerous, enthusiastic, and experience-based testimonials, Applicant respectfully asserts that Applicant's results are, in fact, significant.

In sum, Applicant respectfully asserts that Applicant's secondary considerations are probative and commensurate with the scope of the claims. The exhibits are not merely stating opinions, but contain factual indications of improvement and praise from experienced experts in the field of residential energy conservation and evidence of a long-felt need. Second, the exhibits are commensurate in scope with the claims, as they repeatedly refer to The Energy Guardian® and its two-piece sealing engagement. Third, the exhibits reference replacement of earlier products and refer to the benefits of Applicant's extremely simple design, thus evidencing commercial success; this success was achieved mostly through word-of-mouth advertising. The skepticism of scientists establishes that the results are unexpected. Finally, the enthusiasm and data provided by actual consumers demonstrates the significance of the results of the instant claims.

### **Conclusion**

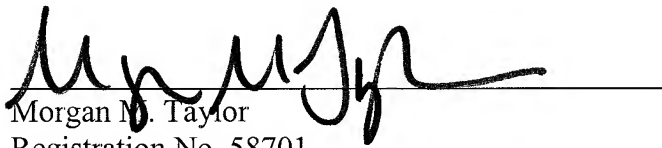
In light of the above, Applicant respectfully requests allowance of all pending claims so that this case can pass on to issue. Enclosed is a Request for Continued Examination and the associated fee, as well as the fee for a two-month extension of time. The request for RCE

withdraws Applicant's current appeal prior to the appeal brief being filed so as to allow the Examiner to reconsider his position with regards to secondary considerations. It is believed no other fees are due in conjunction with this filing; however, if any other fee is required, please consider this paragraph a petition for extension of time and the Commissioner is authorized to charge any fees including for any extension of time necessary for entering this amendment or claim fees to/from our **Deposit Account No. 50-0975**.

If any questions remain, Applicant respectfully requests a telephone call to the below-signed attorney at (314) 444-1316.

Respectfully submitted,  
Lewis, Rice & Fingersh, L.C.

July 16, 2007

  
Morgan M. Taylor  
Registration No. 58701  
Attorney for Applicant

**Customer Number: 22822**  
Lewis, Rice and Fingersh, L.C.  
Attn: Box IP Dept.  
500 N. Broadway, Suite 2000  
St. Louis, MO 63102-2147  
Tel: (314) 444-7600  
Fax: (314) 444-7788